

**REMARKS**

The Final Office Action mailed on October 19, 2006, has been reviewed and the comments of the Patent and Trademark Office have been considered. Prior to this paper, claims 20-24, 31-38 and 41-48 were pending. By this paper, Applicants do not cancel or add any claims. Therefore, these claims remain pending.

Applicants respectfully submit that the present application is in condition for allowance for at least the reasons that follow.

**Claim Rejections Under 35 U.S.C. § 103(a)**

In the Office Action, Claims 20, 23-24, 32 and 35-38 and 44-47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the "Hosemann Combination," which consists of the combination of Hosemann (U.S. Patent No. 4,944,813) with Van Vlaenderen (U.S. Patent No. 3,829,545) and Takazawa (U.S. Patent No. 4,774,105), and claims 20-21, 23, 31-33, 35 and 37-38 and 41-48 are rejected under the same statute in view of the "Strohmeier Combination," which consists of Strohmeier (U.S. Patent No. 3,630,057) in combination with Wiener (U.S. Patent No. 3,446,758) and Findlay (U.S. Patent No. 5,892,176) and the new reference Sou (GB Publication No. 2,077,762). Claims 22 and 34 are rejected in view either of the Hosemann Combination and the Strohmeier Combination when further combined with Kotera (U.S. Patent No. 4,340,519).

In response, Applicants traverse the rejections, and submit that these claims are allowable for at least the following reasons.

The Cited References Do Not Suggest All Claim Recitations

**Hosemann Combination:** Hosemann teaches a method of coating a steel wire, and teaches that the “wire surfaces show a substantially brighter . . . optical appearance.” Applicants previously argued that Hosemann does not disclose or even suggest an intermediate coating that is a metallic coating, as is recited in the claims. Hosemann obtains his alleged surface having a brighter optical appearance by applying a *phosphate* coating to the steel wire, and phosphorous is a *nonmetal*. The mere fact that Hosemann teaches that metal ions may be present in his phosphated coating does not mean that Hosemann is teaching a metallic coating as claimed.

The Office Action states that it “is the position of the examiner that the language of ‘metallic coatings’ and ‘a zinc alloy coating’ embrace metal containing coatings such as those taught by Hosemann.” This is not the standard for determining whether a reference that does not contain an explicit teaching of a recited element (*i.e.*, “metallic coating”) satisfies the third requirement of MPEP § 2143. At most, perhaps the PTO relies on common knowledge in the art, as is discussed and permitted in MPEP § 2144.03, to satisfy the first requirement of MPEP § 2143. However, Applicants note that § 2144.03 allows an applicant “to traverse such an assertion,” and that when an applicant does so, “the examiner should cite a reference in support of his or her position.” (MPEP § 2144.03, second paragraph.) Absent a citation by the PTO of a reference that can be evaluated for all its teachings, Applicants hereby traverse the assertion that it would have been common knowledge in the art that the coatings of Hosemann are metallic coatings. **Applicants thus request, relying on § 2144.03 that the PTO cite a reference and exactly identify where such a reference teaches that the phosphate compositions of Hosemann are metallic coatings, or else allow the claims.**

The method claims recite that the polyester is disposed immediately on the intermediate coating layer. This has the effect of maintaining any bright looking surface of the intermediate coating. To the extent that Hosemann results in a bright looking surface, that surface is may be lost if the surface is not immediately coated with the polyester.

Never once in the Office Action does the PTO address the method step of ***immediately*** applying the polyester to the intermediate coating. Applicants respectfully submit that even if every other element of the claims were present in the cited references, a *prima facie* case of obviousness still has not been established because this element is missing from the prior art and from the analysis in the Office Action.

**Strohmeier Combination:** The Office Action asserts that Wiener teaches “coating steel wires with polyester.” However, the Office Action fails to discuss where Wiener teaches that the polyester is a “***thermoplastic polyester***,” as is recited in the independent claims 20, 21 and 31.

Wiener teaches just the opposite: the “resulting ***thermosettable*** polymeric polyester can be coated on an electrical conductor . . . and heated to cause the polyester to crosslinking forming a ***thermoset*** polyester resin insulative coat on the conductor.” (Wiener, col. 4, lines 35-40, emphasis added.) That is, Wiener is entirely directed towards use of a thermosettable / thermoset polyester, which is the exact opposite of a thermoplastic polyester (the former becomes hard (through crosslinking) when exposed to heat, while the latter deforms and becomes soft when exposed to heat). Thus, the Strohmeier combination does not teach each element of the present invention (and, in fact, teaches away from the present invention by teaching the use of the thermosettable/thermoset polyester).<sup>1</sup>

Further, Wiener teaches the application of a polymeric polyester to a steel wire by means of a fluidized bed process. Even if Strohmeier resulted in a bright looking surface (which it does not, as will be discussed below), the applied polyester would not lead to the maintenance of a bright surface of the intermediate coating. As detailed above with respect to Hosemann, the feature of ***immediately*** applying the polyester is not taught or suggested in the cited references.

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<sup>1</sup> MPEP § 2144.05(III), entitled Rebuttal Of *Prima Facie* Case Of Obviousness, states that a “*prima facie* case of obviousness may also be rebutted by showing that the art, in ***any*** material respect, teaches away from the claimed invention.” (MPEP § 2144.05(III), second paragraph, emphasis added, citations omitted.) Thus, to the extent that a *prima facie* case of obviousness may have been established in the Office Action, that case is hereby rebutted.

Strohmeier does not teach a bright looking surface, and the Office Action has not met its burden of proving so. The Office Action asserts that the Sou reference proves that the actions of Strohmeier result in a bright looking surface. Not so. Simply because a reference such as Sou teaches a process (wetdrawing) that may be utilized to achieve a certain result (brightness) does not mean that the process always is used to achieve that result. In fact, just the opposite is the case – wetdrawing does not always result in a bright looking surface. Applicants refer to their prior discussion regarding inherency, citing MPEP § 2112. It is entirely probable that Strohmeier will be practiced in a manner where a bright looking surface does not result, and thus the process of Strohmeier does not necessarily produce a bright looking surface. As no sufficient rationale has been proffered that the ordinary artisan would have modified Strohmeier to utilize the teachings of Sou, a *prima facie* case of obviousness has not been established with respect to the Strohmeier reference for yet another reason.

Lack of Suggestion or Motivation to Modify or Combine the References

**Hosemann Combination:** The Office Action asserts that it would have been obvious to modify the process of Hosemann with the teachings of Van Vlaenderen “in order to provide steel wires having increased resistance to corrosion and formation of rust.” That is, the Office Action asserts that the ordinary artisan would have found it obvious to modify Hosemann, who teaches the use of a phosphate coating to increase resistance of a surface to corrosion and the formation of rust, according to the teachings of Van Vlaenderen, which teaches increasing the resistance of a surface to corrosion and the formation of rust. This does not comport with the requirements to establish sufficient motivation to modify and combine references.

Hosemann teaches a perfectly acceptable method of achieving corrosion and rust prevention. Why would one of ordinary skill look to another method of achieving the same result (taught by Van Vlaenderen) to modify the perfectly acceptable method of Hosemann? Simply because Van Vlaenderen also teaches corrosion and rust prevention does not mean

that the ordinary artisan would have found it obvious to modify Hosemann according to Van Vlaenderen. This rationale completely vitiates the first requirement of MPEP § 2143. First, it turns MPEP § 2141.01(a), entitled “Analogous and Nonanalogous art,” on its head. That section states that “to rely on a reference under 35 U.S.C. 103, it must be analogous prior art.” It does not state that if the art is analogous, it would be obvious to combine the art. Thus, simply because art may be analogous does not mean that it would have been obvious to combine and modify the art.

Second, if the first requirement of MPEP § 2143 could be met by simply pointing to advantages taught in the references desired to be applied (*e.g.*, Van Vlaenderen touting advantages of his teachings regarding corrosion and rust control), there would always be motivation to modify/combine references once a reference is found that teaches the missing element(s) of the primary reference. This would likewise completely vitiate the first requirement of MPEP § 2143

**Strohmeier Combination:** The Office Action asserts that it would have been obvious “to modify the process of Strohmeier by adding an additional step of further coating with a polyester in order to produce wires *having good insulating properties*.” (Emphasis added.) Not so. It would not have been obvious, and even the ordinary artisan would have known not to do this.

First, Strohmeier teaches a process for the manufacture of a wire for use in gas-shielded welding operations. (Strohmeier, col. 1, lines 3-5.) Even the ordinary artisan would have known that adding a polyester coating as proffered in the Office Action would interfere with the weld as the thermoplastic flowed into the weld seam, potentially resulting in defective welds, depending on the application. Second, defective welds aside, the very phenomenon that the Office Action relies on for motivation modify Strohmeier, “insulating properties,” would have sent the ordinary artisan away from the proposed modification, because if the wires of Strohmeier were to be used in electric arc welding (where the wire is used as the electrode), electrical conductivity, not electrical insulation, is required, as the

added insulation would prevent the electric arc from forming / frustrate the formation of the electric arc.

**Claims 37 and 38**

The Office Action provides as rationale for rejecting claims 37 and 38 that “this process limitation is not construed to be a matter of invention because processing of coated steel wires to result in a bright surface is known in the art.” Even assuming *arguendo* that this is correct, and assuming *arguendo* that determining the amount of brightness is design choice (which it is not, as will be detailed next), Applicants submit that claims 37 and 38 have not been properly examined.

To practice each element of claims 37 and 38, the wire must maintain its bright surface after polyester is disposed upon the bright surface, else the degree of brightness could not be obtained (a degree of brightness cannot be quantified if the material does not have a bright looking surface). That is, the coated steel wire core *with the polyester* has brightness. Thus, it is not enough that polyester merely be deposited on a bright surface (assuming *arguendo* that Hosemann or Strohmeier have such a surface), as the degree of brightness might no longer be quantified as claimed after polyester deposition. By way of example, Applicants submit that after polyethylene terephthalate deposition on the Hosemann wire, the phosphate coating may in fact absorb moisture and any bright surface that may be present with regard to the Hosemann wire may in fact no longer be present. In any event, claims 37 and 38 require that the bright surface be ascertainable (in order to accomplish the action of quantifying the degree of brightness) after polyester deposition thereon. As the Office Action has not even suggested that this would be the case, a *prima facie* case of obviousness has not been established with respect to claims 37 and 38 for yet another reason.

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Applicants respectfully submit that reliance on “design choice” is only appropriate (if at all) when the difference between the prior art and the claims of the present invention amounts only to “Reversal, Duplication, or Rearrangement of Parts.” (See MPEP

§ 2144.04(VI), the **only** portion of MPEP § 2100 that mentions “design choice.”) The difference between the cited references and the present invention is more than just the reversal, duplication, or rearrangement of parts, if only because none of the cited references teach the elements of claims 37 and 38 so that they may be reversed, duplicated, or rearranged. Instead, modifying either of the Combinations as proffered in the Office Action amounts to *physically altering* the parts of the Combinations (assuming *arguendo* that nothing more is involved). Physically alternating parts is not the same as any of “reversal,” “duplication,” or “rearrangement.” Thus, the rejection of claims 37 and 38 should be withdrawn for yet another reasons.

#### **Claims 46 - 48**

Claims 46-48 recite that the intermediate coating layer is identifiably bright after coating said steel core with said polyester. The Office Action fails to cite why the alleged combinations result in the features of these claims. Referring to the above discussion, Applicants submit that the present invention results in the achievement of these features, and it is one of the features that differentiates the present invention from the prior art. For example, the act of immediately applying the polyester coating onto the intermediate layer allows for maintenance of the bright looking surface. **Even if the art was combined as alleged in the Office Action, the features of claims 46-48 still would not be present. Allowance of at least these claims is requested.**

#### **Prior Arguments**

Applicants incorporate by reference the pertinent prior arguments made in their prior Responses.

#### **Conclusion**

Applicants believe that the present application is now in condition for allowance.  
Favorable reconsideration of the application is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. § 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

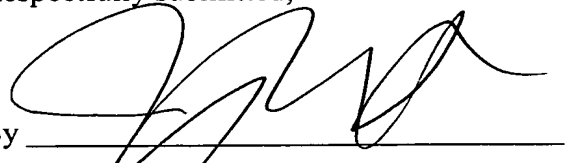
Examiner Gray is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Date

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By



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